



UNITED STATES PATENT AND TRADEMARK OFFICE

zel

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,311	03/16/2004	Sanjeev Nath	NATL-105(US)	1982
909	7590	05/19/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			WALK, SAMUEL J	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2632	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/801,311	Applicant(s) NATH ET AL.	
	Examiner Samuel J. Walk	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/28/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 recites the limitation "the contour or silhouette" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 5 recites the limitation "the face/head" in paragraph 1, "the pupils" in paragraph 2 and "the outline" in paragraph 2. There is insufficient antecedent basis for this limitation in the claim. Examiner suggest amending to read "a face/head" "pupils" and "an outline" or changing the word silhouette to outline.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an

Art Unit: 2632

application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language..

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Leivian (US 2002/0120371).

In reference to Claim 1, Leivian discloses a method of response synthesis in a driver assistance system wherein claimed defining and monitoring an object is met by system 100 through sensor fusion module 102, see para. [0024-0028]. Leivian further discloses the system operates continuously, see para. [0031] and directly, or in other words, instantly, see para. [0039].

In reference to Claim 3, Leivian discloses driver condition data includes video or imaging sensors that monitor head, body, hand and feet movements of the driver, see para. [0028]. Leivian further discloses driver condition interface 206 which uses video and other imaging sensors to provide monitoring on driver blink rate and gaze, see para. [0039].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2632

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leivian in view of Loraas (US 5931254)

In reference to Claim 2, Leivian further discloses driver condition data 116 includes video or imaging sensors that monitor head, body, hand and feet movements of the driver. Leivian does not disclose scanning or tracking a contour or silhouette of an object. However, Loraas teaches of a non-contact operator presence sensor wherein controller 86, using detectors 27, does a detailed analysis of the silhouette of the item sense by the detectors, see Col. 7 lns 64-67 and Col. 8 lns 1-9. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Loraas into the system of Leivian because silhouette analysis provides faster processing.

In reference to Claim 4, see above rejection in reference to Claims 2 and 3.

Allowable Subject Matter

8. Claims 5-21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. The following is an examiner's statement of reasons for allowance:

In reference to Claims 5-21, Applicant's invention has been found to be novel because Prior Art fails to show a contour definition device configured to generate a silhouette of the face/head of the operator of a motor vehicle, pupil reflex determination configured to locate the presence of pupils in a defined zone overlying an outline of the face/head of an operator, real-time monitoring and tracking of outline position and real-time monitoring and tracking of pupil position.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimotani (US 5795306) discloses a bodily state detection apparatus. Burton (US 6575902) discloses a vigilance monitoring system. Griesinger (US 6097295) discloses an apparatus for determining the alertness of a driver. Galiana (US 6091334) discloses a drowsiness/alertness monitor.

Correspondence

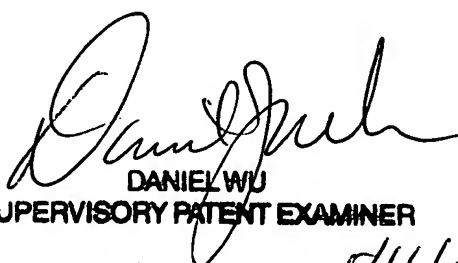
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel J. Walk whose telephone number is (571) 272-2960. The examiner can normally be reached on M-F: 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

Art Unit: 2632

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DANIEL WU
SUPERVISORY PATENT EXAMINER
5/11/05